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CENTRAL INTELLIGENCE AGENCY

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THE SOURCE EVALUATIONS IN THIS REPORT ARE DEFINITIVE.
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(FOR KEY SEE REVERSE)

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2. Zhukhovitzki should probably read Zhukhovitskiy.

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THIS IS UNEVALUATED INFORMATION

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(1) The Karpov Institute consists of two buildings, an older one built about 1913 (the upper branch) and a newer one built about 1926-27 (the lower branch). The building is three stories high and has approximately 16-18 rooms on each floor. The whole building plan is poorly organized. In the older building, the laboratory rooms are very small and the corridors are also small with many dead corners. Compared to this older building, the newer building is more modern and larger in size with larger laboratory rooms, but these are still small judged by laboratory rooms in Germany. Some of the corridors had wooden partitions added to make additional laboratory rooms. The laboratories on the average measure six meters by six meters (with variations up and down). The work rooms are bright and have large windows. In winter as soon as it gets cold, the cracks are closed up by pasting paper over them or by filling them with putty.

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The illumination from within is very poor. The work tables are poorly lighted and the rooms themselves are lighted by electric bulbs which hang from the ceiling without shade or reflector. Little is done to keep the buildings in shape except for the cleaning up which is done daily by half a dozen cleaning women. Once a year, before May 1, the outsides of the buildings are whitewashed (but not newly plastered). The institute grounds are run-down and neglected. 50X1-HUM

, They also have small shelves for storage of bottles of chemicals. The drinking water in Moscow (which was also used in the laboratories) though sufficient in summer quantitatively, showed a temperature of 21-23 degrees. This temperature was unfavorable for operating the coolers and thermostats.

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(2) The laboratories are equipped with connections for 380-volt alternating current and sockets for direct current

The boards with the connections (they are 50X1-HUM free clips, not sockets) stand on the laboratory tables. All wires in the laboratory, including the light wires, run along the walls and are not underneath the plaster. The fuses consist of free running wires. The whole power net of the Karpov Institute is heavily overloaded. Power shut-offs did not occur in the years 1947-48; however, the electrical motors of the blowers for the gas exhaust box were frequently turned off, regardless of whether work was being performed in these boxes or not. Usually the laboratories were not informed of the power shut-off. The Karpov Institute is connected with the Moscow city gas net, which was fed, at that time, with natural gas from Saratov. The gas pressure often varied greatly; most of the time it was so slight that it was hardly possible to keep laboratory burners going. Junkers gas-heating ovens (for baths) imported from Germany could not be operated because of the low gas pressure. The gas also contained a lot of sulphur which was noticeable when it was burned in closed rooms. Further connections (vacuum, compressed air, nitrogen, etc.) do not exist at Karpov Institute. However, solid carbonic acid (dry ice) is available for cold mixtures. Since 1948 liquid oxygen is available too and is stored in a small tank located on the institute grounds between the upper and lower branch. The supply of distilled water was sufficient to satisfy the most necessary demands. Since the winter of 1947-48 one special workshop has been working on cleaning used quicksilver (for Manometers, etc.).

(3) Various workshops at the institute work for the needs of the institute. About half a dozen people work at a glass-blowing shop located at the lower branch; quartz is also blown. The quality of the glasswork is good. The work of the locksmith shop, however, is unreliable. In spite of the fact that sketches were submitted, measurements of apparatus ordered were often not correct. The carpenter shop at the institute just does simple work such as furniture repair and putting up partitions, etc. The electrotechnical shop has only primitive equipment and is occupied with repairs only, for the most part. Generally speaking, it can be said that even with these primitive tools, they deliver good workmanship, though often not in time and not reliably. It is customary to speed up completion of orders by having the laboratory deliver pure alcohol to the workmen. Two to three weeks before the big USSR holidays (1 May and the day of revolution in November), the workshops keep busy with preparations for these days and accept no work from the laboratories.

(4) The library of the institute is located in the upper branch. It is comparable to any European library and has a number of foreign newspapers and new books. Among others the following periodicals are available there: Industrial and Engineering Chemistry, Journal of the American Chemical Society, Mechanical Engineering, Chemical Engineering Progress, Chemical Abstracts, Journal of Organic Chemistry, Chemie et Industrie, Chemische Zentralblatt, and many others. All Russian periodicals are available both those referring to physics and chemistry and those of a general nature. Of books also, all the 50X1-HUM important works are at hand. [redacted] the library was not used as extensively as one could expect at a scientific institute. Many of the men there just read the daily paper. The new numbers of foreign periodicals arrive two to three months late. They are censored either by the removal of a whole page or by the cutting out of a few offensive lines. Whole libraries brought from German factories were loaded in sacks and taken to the Karpov Institute. There the books were just dumped like potatoes and stacked in glass cases helter-skelter. They stayed that way for over a year. Pages and leaves of scientific periodicals (i.e. "Reports" from the years 1890-1900) were used in the canteen to wrap coldcuts and cheese, e to.

(5) The Karpov Institute is a scientific institute. Research is kept within the boundaries of the laboratories. Semi-technical tests of larger equipment are not worked on, with the exception of "Dest. kolonne" (distilling column?) in the lower branch and "700-atue anlage" (700 atmospheric excess pressure equipment) to produce heavy water. It is understandable therefore that they store only very small quantities of chemicals. If larger quantities are wanted the purpose for which they are needed must be given. Then they are ordered from outside the institute. The purest chemicals such as Merck, puriss., pro analysi, are scarce; these are given out by the gram only. There is also a scarcity of good quality glass. Russian glass for instruments is of poorest quality. Until 1947 they had a supply of instruments made of American pyrex glass. From then on Jenaer instrument glass of good quality was used, but there was not enough of it. There might be more now. All the Jenaer glass instruments available at the institute are standard ground.

(6) Most of the laboratory personnel employed at the institute have had little education and must first be taught how to perform the simplest tasks (simple analyses, supervision of equipment). The scientific personnel (coworkers of the professors) are forced to do the manual work themselves, instead of just functioning in a supervisory capacity because there is a scarcity of personnel.

(7) Everybody at the institute works eight hours, until 6 p.m. including Saturdays. They are strict about starting work on time and if one is late several times even for a few minutes, heavy punishment is meted out. Professors have a 30-hour week, which enables almost all of the professors at the institute to occupy jobs at other institutes too (and of course get the extra salaries also). Laboratory workers have four weeks vacation per year, while professors and their coworkers have up to eight weeks vacation per year.

(8) Everybody working at the institute has a pass given out by the management and must show it to the guards who are stationed in front of each building. Visitors get a temporary pass. One must have the

permission of the manager of the laboratory to leave the institute grounds during working hours. The director of the institute has a military-like power of command. All his directives start with the words, "I command you...."

(9) [redacted] there are 20-25 professors in the research department. 50X1-HUM There are professors with laboratories and professors without laboratories. Those with laboratories receive about 6,000 rubles per month and those without laboratories receive about 4,000 rubles per month. TYOMKIN and ZHUKHOVITZKI are professors there at Karpov.